of a tornado, passed over Elizabeth, N. J., at 3:20 p. m., eastern time. No casualties; property loss caused principally by the unroofing of buildings and the subsequent drenching of the contents, amounted to \$10,000. Evidently the tornado cloud was not fully developed or the damage would have been much greater.

18th.—A wind storm of sufficient strength to unroof buildings and prostrate trees, passed through a portion of Genesee

County, N. Y., about 4 p. m., eastern time.

24th.—A severe storm, generally believed to have been a tornado, visited Lima, Ohio, about 2 p. m., central time. It is said that two funnel clouds united over the northeastern part of the town. The damage to property was very great, probably \$100,000. No lives were lost although about 20

persons were more or less injured.

26th.—A severe tornado, having its origin on Lake Ontario, swept across the Niagara Peninsula in a path about 300 feet wide, crossed the Niagara River at Tonawanda and disappeared only to reappear in a less destructive form in the southeastern part of Erie County. It crossed into Genesee county north of Alden and was last observed at Darien at a distance of 45 miles in an air line from the point of origin. The funnel cloud was first observed on Lake Ontario. Accounts differ as to the time in passed St. Catherines, Ont.; one account gives the time as 2:30 p.m., another 3:25 p.m., and a third as 3:45 p.m. It crossed the Niagara River at Grand Island and struck Tonawanda between 4:30 and 5:00

At Alden in Erie County as many as three funnel clouds were observed, none of which endured for any length of time. The observer at the last-named place reports an exceedingly rapid rate of movement, probably 60 miles per hour. Five persons were killed as Merritton and vicinity, and probably 18 or 20 injured throughout the course of the storm. The property loss was large, estimated as \$100,000 at St. Catherines, \$200,000 at Merritton, and \$70,000 at Tonawanda, total \$370,000. The path of the tornado was exceedingly narrow, not over 300 feet. Large hail fell on the outer edges. The barograph at the Buffalo Weather Bureau office, 4 miles distant from the funnel cloud, did not show any marked disturbance at the time of the passage of the tornado. The curve for the afternoon forms a very open V, the rise in pressure occurring at the time of passage of the tornado. maximum velocity of the wind was 42 miles per hour from 5, 6, 15, 16, 18; Saugeen, 15; Parry Sound, 15, 18; Port the west at 5:05 p. m.

29th.—A severe local wind demolished a building in the 3, 23; Qu'Appelle, 1, 17; Swift Current, 1.

suburbs of Louisville, Ky., killing 1 person, the only occupant. Loss to building about \$2,000.

#### WATERSPOUT.

Bay St. Louis, Miss., September 29, at 6:50 p. m. a beautiful waterspout formed a short distance from shore, and went in a westerly direction, increasing in strength. It was followed by a heavy rain for one hour. One house destroyed. two unroofed, and another lifted from pillars.—Report of voluntary observer.

## ATMOSPHERIC ELECTRICITY.

Thunderstorms.—Two thousand six hundred and ninety-six reports of thunderstorms were received during the current month as against 1,732 in 1897, and 4,853 during the preceding month.

The dates on which the number of reports of thunderstorms for the whole country were most numerous were: 4th, 328;

5th, 210; 6th, 208; 2d, 193; 7th, 163.

Reports were most numerous from Ohio, 243; Illinois, 215; New York, 169; Missouri, 153.

Auroras.—The evenings on which bright moonlight must have interfered with observations of faint auroras are assumed to be the four preceding and following the date of full moon, viz, from 1st to 4th, and 25th to 30th.

The greatest number of reports were received for the fol-

lowing dates: 9th, 62; 2d, 59; 10th, 28; 11th, 21.

Reports were most numerous from Wisconsin, 32; North Dakota, 19; Minnesota, 17; Michigan, New Hampshire, and New York, 16.

In Canada.—Auroras were reported as follows: Yarmouth, 6, 9; Charlottetown, 9; Father Point, 9, 12, 16, 24, 28; Quebec, 9, 10, 13, 16, 20, 28; Toronto, 2; White River, 11; Kingston, 2, 3, 16; Port Stanley, 2; Port Arthur, 17; Winnipeg, 11, 13, 29; Banff, 6, 9, 10, 14; Minnedosa, 8, 10, 11, 14, 15, 29; Qu'Appelle, 11, 12, 14; Kamloops, 9; Battleford, 23; Barkerville, 2.

Thunderstorms were reported as follows: Grand Manan, 5; Bermuda, 11, 13, 14, 17, 18, 19, 22, 26, 28; Yarmouth, 3; Charlottetown, 5; Father Point, 4, 10; Quebec, 4, 9, 18, 26, 30; Montreal, 1, 2, 4, 9, 18, 19, 30; Toronto, 3, 18, 26; White The River, 2, 3, 18, 21, 29; Kingston, 1, 2, 5, 18; Port Stanley, 4, Arthur, 3, 22; Winnipeg, 17, 23; Banff, 20, 21; Minnedosa,

### CLIMATE AND CROP SERVICE.

By James Berry, Chief of Climate and Crop Service Division.

The following extracts relating to the general weather conditions in the several States and Territories are taken from the monthly reports of the respective sections of the Climate and Crop Service. The name of the section director is given after each summary.

Rainfall is expressed in inches.

Alabama.—The mean temperature was 75.5°, or 3.3° above normal; the highest was 100°, at Evergreen on the 2d and 6th, and the lowest, 48°, at Riverton on the 7th and at Madison on the 9th. The average precipitation was 3.58, or 0.80 above normal; the greatest monthly amount, 16.40, occurred at Mobile, and the least, 0.46, at Sturdevant.—

The Market was 76.1°, or 0.9° above normal; the highest was 118°, at Parker on the 10th, and the lowest, 27°, at Flagstaff on the 12th. The average precipitation was 0.36, or 0.55 between the 12th was 0.36, at Righter than 12th was 0.36, at Righter

gon on the 8th. The average precipitation was 7.35, or 4.07 above normal, and the highest average for September on record; the greatest

monthly amount, 21.95, occurred at Moore, and the least, 3.26, at Amity.—Geo. G. Harkness.

California.—The mean temperature was 69.2°, or 1.3° below normal; the highest was 117°, at Volcano Springs on the 8th and 19th, and the lowest, 14°, at Sneddens Ranch on the 3d. The average precipitation was 0.70, or 0.31 above normal; the greatest monthly amount, 4.09, occurred at Las Fuentes, while none fell at many stations.—G. H. Willean

Colorado.—The mean temperature was 57.1°, or 1.7° below normal; the highest was 99°, at Crook, Lamar, and Minneapolis on the 2d, and the lowest, 8°, at Lake Moraine on the 12th. The average precipitation was 0.83 or 0.19 below normal; the greatest monthly amount, 3.28, occurred at Cope, while none fell at Saguache.—O. D. Stevart.

the highest was 118°, at Parker on the 10th, and the lowest, 27°, at Flagstaff on the 12th. The average precipitation was 0.36, or 0.55 below normal; the greatest monthly amount, 2.11, occurred at Bisbee, while none fell at many stations.—W. G. Burns.

Arkansas.—The mean temperature was 75.1°, or 1.9° above normal; the highest was 104°, at Conway on the 2d, and the lowest, 42°, at Ore-Morgan.—J. B. Marbury.

Illinois.—The mean temperature was 69.3°, or 2.3° above normal; the highest was 99°, at New Burnside on the 2d, and the lowest, 33°, at nignest was 99°, at New Burnside on the 2d, and the lowest, 33°, at Kishwaukee on the 12th. The average precipitation was 4.86, or 1.34 above normal; the greatest monthly amount, 10.09, occurred at Robinson, and the least, 2.16 at Riley.—C. E. Linney.

Indiana.—The mean temperature was 69.6°, or 3.6° above normal; the highest was 100°, at Washington on the 4th, and the lowest, 32°, at Topeka on the 12th. The average precipitation was 4.06, or 0.96 above normal; the greatest monthly amount, 8.28, occurred at Greens.

above normal; the greatest monthly amount, 8.28, occurred at Greensburg, and the least, 0.86, at Bedford.—C. F. R. Wappenhans.

Iowa.—The mean temperature was 65.3°, or slightly above normal; the highest was 99°, at Galva on the 1st, and the lowest, 29°, at Britt, Estherville, Sibley, and Spencer on the 30th. The average precipitation was 2.69, or slightly below normal; the greatest monthly amount, 8.45, occurred at Fort Madison, and the least, 0.41, at Estherville.—
G. M. Chappel.

Kansas.—The mean temperature was 69.4°, or 0.3° above normal; the highest was 108°, at Meade on the 5th, and the lowest, 28°, at Colby on the 7th. The average precipitation was 3.85, or 1.62 above normal; the greatest monthly amount, 9.39, occurred at Fanning, and the least, 0.96, at Winfield.—T. B. Jennings.

Kentucky.—The mean temperature was 73.4°, or 2.6° above normal; the highest was 103°, at Russellville on the 1st, and the lowest, 42°, at Loretto on the 7th and at Maysville on the 12th. The average precipi-

Loretto on the 7th and at Maysville on the 12th. The average precipitation was 4.36, or 1.83 above normal; the greatest monthly amount, 9.20, occurred at Blandville, and the least, 1.50, at Carlisle.—G. E. Hunt.

Louisiana.—The mean temperature was 78.1°, or 1.3° above normal; the highest was 100°, at Liberty Hill on the 4th, 5th, and 6th, and at Rayne on the 3d, and the lowest, 51°, at Bastrop on the 8th and at Robeline on the 8th and 9th. The average precipitation was 10.31, or 7.46 above normal, and the highest average for September on record; the greatest monthly amount, 19.55, occurred at Sugartown, and the least, 3.05, at Robeline.—A. G. McAdie.

Maguland and Delagagge —The mean temperature was 69.9° or 1.8°

Maryland and Delaware.—The mean temperature was 69.9°, or 1.8° above normal; the highest was 100°, at Laurel, Md., on the 3d, and the lowest, 29°, at Deerpark and Sunnyside, Md., on the 12th. The average precipitation was 2.01, or 0.77 below normal; the greatest monthly amount, 4.28, occurred at Seaford, Del., and the least, 0.51, at Smithsburg, Md.—O. L. Fassig.

Michigan—The mean temperature was 63.0° or 3.0° shows normal:

Michigan.—The mean temperature was 63.0°, or 3.0° above normal; the highest was 99°, at Owosso on the 3d, and the lowest, 18°, at Humboldt on the 10th. The average precipitation was 2.76, or nearly normal; the greatest monthly amount, 6.10, occurred at Mount Clemens, and the least, 1.20, at Manistee.—C. F. Schneider.

Minnesota.—The mean temperature was 60.6°, or about 1.0° above

normal; the highest was 102°, at Wabasha on the 2d, and the lowest, 22°, at Glencoe on the 12th. The average precipitation was 1.52, or about 1.00 below normal; the greatest monthly amount, 4.56, occurred at Kochiching, and the least, 0.09, at Rolling Green.—T. S. Outram.

Mississippi.—The mean temperature was 76.6°, or about 2.0° above

normal; the highest was 103°, at Columbus on the 18th, and the lowest, 42°, at French Camp on the 8th. The average precipitation was 6.25,

or about 3.00 above normal; the greatest monthly amount, 21.76, occurred at Biloxi, and the least, 1.74, at Corinth.—W. T. Blythe.

Missouri.—The mean temperature was 71.1°, or 2.2° above normal; the highest was 103°, at Mexico on the 3d, and the lowest, 30°, at Potosi on the 8th. The average precipitation was 6.83, or 3.60 above normal; the greatest monthly amount, 14.67, occurred at Sublett, and the least, 3.23, at St. Louis.—A. E. Hackett.

Montana.—The mean temperature was 55.9°, or about normal; the highest was 96°, at Glendive on the 27th, and the lowest, 20°, at Castle on the 10th. The average precipitation was 0.96, or 0.20 above normal; the greatest monthly amount, 2.45, occurred at Poplar, and the least, 0.13, at Darby.—E. J. Glass.

Nebraska.—The mean temperature was 63.6°, or about normal; the Clarke on the 7th. The average precipitation was 2:30, or about normal; the above normal; the greatest monthly amount, 8.93, occurred at Rulo, while none fell at Merriman.—G. A. Loveland.

Nonda.—The mean temperature was 61.1°, or about normal; the highest was 97°, at Sodaville on the 10th, and the lowest, 18°, at Elko on the 29th. The average precipitation was 0.20, or 0.07 below normal; the greatest monthly amount, 0.74, occurred at Sodaville, while none fell at several stations.—R. F. Young.

New England.—The mean temperature was 62.6°, or 2.6° above normal; the highest was 95°, at Lake Cochituate, Mass., on the 1st, 2d, and 3d, and at Pawtucket, R. I., on the 3d; the lowest was 25°, at Jacksonville, Vt., on the 21st. The average precipitation was 2.96, or 0.36 below normal; the greatest monthly amount, 7.08, occurred at Warner, N. H., and the least, 0.76, at Woods Holl, Mass.—J. W. Smith.

New Jersey.—The mean temperature was 68.6°, or 2.8° above normal; the highest was 100°, at Elizabeth and Somerville on the 1st, and at Vineland on the 3d, and the lowest, 31°, at Charlotteburg on the 21st. The average precipitation was 2.00, or 1.92 below normal; the greatest monthly amount, 3.87, occurred at Friesburg, and the least, 0.65, at Newton.—E. W. McGann.

New Masico.—The mean temperature was 63.8° or about 10° below New England,—The mean temperature was 62.6°, or 2.6° above nor-

New Mexico.—The mean temperature was 63.8°, or about 1.0° below

normal; the highest was 98° at Eddy on the 4th, and the lowest, 18°. at Buckmans and Winsors on the 12th. The average precipitation was 0.74, or about 1.00 below normal; the greatest monthly amount, 1.74, occurred at Mesilla Park, while none fell at Bluewater.—R. M. Hardinge.

New York.—The mean temperature was 64.2°, or 3.2° above normal;

the highest was 98°, at Willets Point on the 4th, and the lowest 27°, at Number Four on the 21st. The average precipitation was 2.96, or 0.41 below normal; the greatest monthly amount, 6.63, occurred at Canton, and the least, 1.01, at Primrose.—R. G. Allen.

North Carolina.—The mean temperature was 72.3°, or 2.0° above nor-

mal; the highest was 95°, at Tarboro on the 1st, and the lowest, 40°, at Highlands on the 25th. The average precipitation was 4.24, or slightly below normal; the greatest monthly amount, 11.21, occurred at Highlands, and the least, 0.90, at Beaufort.— C. F. von Herrmann.

North Dakota.—The mean temperature was 56.5°, or 0.2° below normal; the highest was 98°, at Medora on the 2d, at Wahpeton on the 1st, and at Washburn on the 20th, and the lowest, 10°, at Fort Yates on the 11th. at washourn on the 20th, and the lowest, 10°, at Fort Yates on the 11th. The average precipitation was 1.27, or 0.12 above normal; the greatest monthly amount, 3.40, occurred at Churchs Ferry, and the least, 0.15, at Ellendale.—F. J. Rupert.

Ohio.—The mean temperature was 67.8°, or 2.5° above normal; the highest was 102°, at Seaman on the 1st, and the lowest, 33°, at the same station on the 12th. The average precipitation was 2.56, or 0.04 below normal; the greatest monthly amount 7.31 occurred at Rement and

station on the 12th. The average precipitation was 2.56, or 0.04 below normal; the greatest monthly amount, 7.31, occurred at Bement, and the least, 0.83, at New Bremen.—J. Warren Smith.

Oklahoma.—The mean temperature was 74.1°; the highest was 106°, at Anadarko on the 15th, and the lowest, 35°, at Arapaho and Putnam on the 12th. The average precipitation was 2.24; the greatest monthly amount, 12.13, occurred at Tahlequah, and the least, trace, at Kemp.—

J. I. Widmeyer.

Oregon.—The mean temperature was 60.0°, or 2.1° above normal; the highest was 103°, at Vernonia on the 7th, and the lowest, 13°, at Burns on the 30th. The average precipitation was 2.24, or 0.55 above normal; the greatest monthly amount, 8.74, occurred at Glenora, and the least, trace, at Lakeview and P. Ranch.—B. S. Pague.

Pennsylvania.—The mean temperature was 66.0°, or 3.2° above normal; the highest was 100°, at Hawley and Lockhaven on the 1st, and at Aqueduct on the 3d, and the lowest, 25°, at Dushore on the 21st. The average precipitation was 1.70, or 1.87 below normal; the greatest monthly amount, 3.95, occurred at Kennett Square, and the least, 0.38, at Lockhaven.—T. F. Townsend.

South Carolina.—The mean temperature was 76.0°, or 1.9° above normal; the highest was 96°, at Cheraw on the 28th and at Kingstree on the 4th, and the lowest, 43°, at Shaws Fork on the 13th. The average precipitation was 4.06, or nearly normal; the greatest monthly amount, 10.64, occurred at Mount Carmel, and the least, trace, at Georgetown.—J. W. Bauer.

South Dakota.—The mean temperature was 61.5°, or about 1.0° above normal; the highest was 110°, at Interior on the 2d, and the lowest, 18°, at Rochford on the 10th. The average precipitation was 0.90, or 0.42 below normal; the greatest monthly amount, 1.91, occurred at Desmet, and the least, 0.04, at Nowlin.—S. W. Glenn.

Tennessee.—The mean temperature was 73.2°, or about 3.0° above normal; the highest was 100°, at Dover on the 4th, and the lowest, 38°, at Erasmus on the 8th. The average precipitation was 4.31, or about 0.50 above normal; the greatest monthly amount, 8.31, occurred at Kingston, and the least, 1.75, at Carthage.—H. A. McNally.

Teras.—The mean temperature, determined by comparison of 35 stations distributed throughout the State, was 1.1° above the normal. There was a slight deficiency in temperature over west Texas and the panhandle and nearly normal conditions prevailed along the west coast and over southwest Texas, while the temperature was above the normal over the other portions of the State, with the greatest excess over east Texas and the eastern portion of central Texas. The highest was 106°, at Rhineland on the 13th, and the lowest, 37°, at Amarillo on the 11th. The average precipitation, determined by comparison of 36 stations distributed throughout the State, was 1.79 below the normal. There was a slight excess along the east coast and in the vicinity of Longview, while there was a general deficiency elsewhere ranging from about 1.00 to 3.50 over the panhandle, central, west, southwest, and north Texas and from 1.10 to 4.13 over east Texas and the western portion of the coast district, with the greatest deficit in the vicinity of College Station. The greatest monthly amount, 6.78, occurred at Galveston, while none fell at Sanderson and Valentine.—J. L. Cline.

Utah.—The mean temperature was 61.0°, or about normal; the highest was 102°, at St. George on the 6th, and the lowest, 15°, at Loa on the 10th and at Woodruff on the 11th. The average precipitation was 0.10; the greatest monthly amount, 1.04, occurred at Vernal, while none fell at many stations.—J. H. Smith.

Virginia.—The mean temperature was 68.7°, or about 1.0° above normal; the highest was 99°, at Alexandria on the 3d and at Tobaccoville on the 5th, and the lowest, 36°, at Burkes Garden on the 9th. The average precipitation was 2.98, or 1.49 below normal; the greatest monthly amount, 6.40, occurred at Wytheville, and the least, 0.84, at Alexandria.—E. A. Evans.

Washington.—The mean temperature was 59.5°, or about 2.0° above

C. M. Strong.

normal; the highest was 96°, at Fort Spokane on the 17th and at Lind on the 18th, and the lowest, 24°, at Hunters on the 28th. The average precipitation was 2.78, or about 0.75 above normal; the greatest

Wisconsin.—The mean temperature was 62.4°, or 1.4° above normal; the highest was 99°, at Medford and Spooner on the 2d, and the lowest, 23°, at Barron and Knapp on the 10th. The average precipitation was 2.00, or 0.95 below normal; the greatest monthly amount, 3.70, occurred at Koepenick, and the least, 0.51, at Pekin.—W. M. Wilson.

Wyoming.—The mean temperature was 54.2°, or 3.1° below normal;

average precipitation was 2.78, or about 0.75 above normal; the greatest monthly amount, 7.65, occurred at Cedar Lake, and the least, 0.05, at Kennewick.—G. N. Salisbury.

West Virginia.—The mean temperature was 67.6°; or about 2.5° above normal; the highest was 97°, at New Cumberland on the 1st, and the lowest, 33°, at Uppertract on the 11th. The average precipitation was 2.42, or about 0.65 below normal; the greatest monthly amount, 4.75, at New Cumberland on the 1st, and the lowest, 8°, at Uppertract on the 11th. The average precipitation was 2.00, or 0.95 below normal; the greatest monthly amount, 3.70, occurred at Koepenick, and the least, 0.51, at Pekin.—W. M. Wilson.

Wyoming.—The mean temperature was 54.2°, or 3.1° below normal; the highest was 100°, at Bittercreek on the 19th, and the lowest, 8°, at City on the 28th. The average precipitation was 2.00, or 0.95 below normal; the greatest monthly amount, 3.70, occurred at Koepenick, and the least, 0.51, at Pekin.—W. M. Wilson.

Wyoming.—The mean temperature was 54.2°, or 3.1° below normal; the highest was 100°, at Bittercreek on the 19th, and the lowest, 8°, at City on the 28th. The average precipitation was 2.00, or 0.95 below normal; the greatest monthly amount, 3.70, occurred at Koepenick, and the least, 0.51, at Pekin.—W. M. Wilson.

Wyoming.—The mean temperature was 54.2°, or 3.1° below normal; the greatest monthly amount, 4.75, below normal; the greatest monthly amount, 2.70, occurred at Koepenick, and the least, 0.51, at Pekin.—W. M. Wilson.

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Wyoming.—The mean temperature was 54.2°, or 3.1° below normal; the greatest monthly amount, 3.70, occurred at Koepenick, and the least, 0.50, at Greatest monthly amount, 3.70, occu

# SPECIAL CONTRIBUTIONS.

# THE PROBABLE STATE OF THE SKY ALONG THE PATH OF TOTAL ECLIPSE OF THE SUN, MAY 28, 1900.

Second report, observations of 1898, by Prof. Frank H. Bigelow.

In the Monthly Weather Review for September, 1897, was published the first report of the observations taken under the direction of the United States Weather Bureau, in order to determine the probable meteorological conditions likely to prevail along the path of the total eclipse of the sun, which will occur in the Southern States, on May 28, 1900. The present report is the second of the series and contains the result of the survey of the sky along the path, for the period beginning May 15 and ending June 15, 1898; it will be followed by a third in 1899. The observations have been conducted during 1898 on precisely the same plan as in the preceding year, and generally by the same observers, so that the correctness of the numbers herein given is fortified by longer experience than was the case in 1897. Moreover 87 stations reported this year, as against 62 stations last year.

The scale of the observations is as follows: For the general state of the sky, 0 = sky entirely clear; 1 = sky \(\frac{1}{4}\) cloudy; 2 = sky  $\frac{1}{2}$  cloudy;  $3 = \text{sky } \frac{3}{4}$  cloudy; 4 = sky entirely overcast.For the sky near the sun,  $0 = \sin \alpha$  clear from clouds;  $1 = \sin \alpha$  in scattered clouds;  $2 = \sin \alpha$  in a mass of clouds;  $3 = \sin \alpha$  quite invisible. Hence the sums of the numbers recorded indicate the total observed cloudiness. Since, under general state of the sky, this might have been equal to 12 for each day, the total possible cloudiness would be 384 for the given 32 days; and for the sky near the sun the sum might be 9 for each day, and 288 for 32 days. Hence, dividing the totals at any station by these numbers, we have its percentage; or, dividing the mean for all the stations within a State by these numbers, we have the percentage for that State.

TABLE 1.

Stations.	Observers.	General state of the sky, a. m.				Sky near the sun, a. m.			
		8:00	8:30	9:00	Sum.	8:00	8:30	9:00	Sum.
Virginia. Onancock Birdsnest	J. C. Weaver C. R. Moore	58 76	54 72	57 72 63	169 220 191	41 55 39	38 44 30	89 46 36	118 145 114
Hampton Institute Cape Henry Norfolk Indika	C. P. Cronk James J. Gray J. O. Branch	64 66 62 38	64 68 57 34	70 56 33	204 175 105	46 45 20	52 42 19	50 41 20	148 128 59
Wallacetown 1  Means  Per cent of total	Jno. G. Wallace possible cloudiness	59	49	59	177 177 44.9	43	40	43	126 120 41.7
North Carolina. Willeyton Gatesville	H. B. Cross J. T. Walton	51 44	49 43	46 33	146 120	35 30	32 29	27 23 16	94 82
Winton <sup>2</sup>	S. S. Daniel	20 39 57 86	20 40 61 72	19 39 53 62	59 118 171 220	17 35 39 57	17 36 42 51	32 36 47	50 103 117 155
Rockymount Springhope Wilson Louisburg	Gaston Battle Geo. W. Bunn W. S. Harriss Thomas B. Wilder	56 48 26 29	54 48 26 29	55 44 26 26	165 140 78 84	34 15 14	42 31 16 16	39 31 16 14	125 96 47 44
Auburn Selma Raleigh	Troy Poole	37 23	35 18 58	36 21 58	108 63 170	26 18 40	23 15 87	23 17 36	72 50 113

TABLE 1-Continued.

Stations.  North Carolina-Con Pittsboro Moncure	Observers.	Gene		a. m.	of the	Sky	nean a.	r the m.	sun,
North Carolina-Con Pittsboro Moncure		8:00	0.90				1	1	
Pittsboro Moncure			0.00	9:00	Sum	3:00	8:80	9:00	Sum
Pittsboro Moncure									
Moneure	. A. H. Merritt		39	36	123	36	31	25	Ω2
	W. H. Thompson	38	34	30	102	28	24	21	78
Albemarle		32	32	32	96	17	16	16	49
Fayetteville			37	34	108 72	23 21	25 21	24	72 58
Laurinburg	. L. D. McKinnon J. M. Stansill		27 33	21 24	98	14	7	16 4	25
Rockingham Wadesboro		13	10	6	29	10	5	3	18
Monroe		23	17	14	54	14	8	6	28
Means Per cent of total	possible cloudiness		   <b></b>		111 28.2				74 25.7
South Carolina.	James II. Borns	36	34	31	101	24	22	22	68
Cheraw 3	James H. Powe		32	31	95	16	17	14	47
Lancaster Lewis	J. C. Foster S. M. Burdell		19	20	55	14	18	22	54
Santuck			16	14	51	13	15	8	36
Columbia	. J. W. Bauer	34	29	28	91	22	24	21	67
Little Mountain	Jno. M. Lease	38	36	26	100	25	19	15	59
Prosperity (near)	. J. Perry Cook	19	18	17	54	16	14	11	41
Chappels	· Samuel R. Keith		23	18	69	19	10	12	41
Longshore Crosshill <sup>8</sup> Saluda	W. G. Peterson	33	28	22	83	19 17	12 17	16	87
Crossnill*	E. T. McSwain Ernest L. Mathers	19 31	20 28	18 23	83	20	17	14	50 51
Greenwood	M. M. Calhoun	111	15	15	41	8	9	10	27
Trenton		10	19	5	24	7	5	13	15
Trov	. A. C. Kennedy			39	125	278		17	65
Hodges	W. K. Carlisle	22	22	15	59	15	17	8	40
Watts Mount Carmel	. Dr. J. W. Thomas	24	21	17 15	62 29	20	16 11	11 20	47 38
Means Per cent of total					69 17.5		1		16,0
Georgia.	•			İ					
Camak	. J. A. Chapman	. 16	11	8	30	12	8	1	21
Crawfordville	J. P. Moody	. 26	24	24	74	6	6	5	17
Athens		. 21	18	16	55	14	8	4	56
Covington	. J. S. Carroll	. 7	8	9	24	18	18	21	57
Atlanta	P. McDonough	28	28	24	80	21	19	18	58
	E. Lovelace	10				6	8	10	24
Griffin	A G Goodlee	. 12	12 10	16 9	27	6	10	8	24
Talbotton		. 22	22	21	65	7	7	8	2
Westpoint	T. J. Jennings	. 10	7	4	21	5	3	2	10
Columbus	Josephine W. Long.	. 33	17	14	64	23	16	11	50
Means Per cent of tota	l possible cloudiness.				48 12.2				10.8
Alabama.	possible croudiness.				1 2.01.10				
Smiths Station	A. H. Frazer	. 18	17	18	53	15	17	11	4
Fort Mitchell	Lohn Contav	20		27	87	20			6
Auburn	James T. Anderson	. 26			67	21		17	5
Loachapoka	<u>W. W.</u> David	. 25		23	72	11			3
Tallassee 3		. 29	29	25	83	24			6
Union Springs	P. L. Cowan	17	20		57	18			6 3
Mathews Montgomery	I. Gwynn Gardiner.	16			45 62	10 33			5
Highland Home					54	11			i
Fort Deposit	J. F. Haltemir	. 18			40	9			
Greenville	J. F. Haltemir F. E. Dey J. S. Crum	. 17	13		35	9			
Pineapple	J. S. Crum	. 30	42	33	105	38	40	25	10
Castleberry	S. Castleberry	. 17	13		42	18			4
Bay Minette	. Mrs. M. J. Washbur	n  18			58	16			
Latham	M. McGowan	16	16	16	48	6	6	4	1
Mobile	yw. M. Dudley	( 25	33	31	99	10	12	13	8
Mount Vernon	C. Becker J. G. Michael	. 48			135 59	29 12			
Years		- 1						1	
Means Per cent of tota	l possible cloudiness.								15.
Mississippi.	Samuel Pool	. 14	17	15	46	15	13	19	4
Lockogrille									
Lockogrille	E. Davis	. 37	39	44	3 120	55	54	56	16
Lockogrille	E. Davis	. 37	39 10	44 8	<sup>3</sup> 120 24	55 4	54	56	16
Lockogrille	E. Davis	. 37 . 6 . 36	39 10 37	44 8 41	3 120 24 114	55 4 22	54 8 24	56 6 25	16 1 7